WHAT IS CLAIMED IS:

1. A channel plate having a porous element, wherein the porous element includes an aluminum compound.

2. A channel plate, comprising: a substrate; a first electrode placed on the top face of the substrate; and a second electrode placed on the bottom face of the substrate, wherein:

said substrate is a porous element having a plurality of pores extending therethrough;

wherein the porous element is formed with a compound including aluminum and the porous element has an electron multiplier on a wall surface of the pore.

3. The channel plate according to claim 2, wherein said electron multiplier emits secondary electrons due to collision of the electrons with said electron multiplier.

4. The channel plate according to claim 2, wherein said electron multiplier has oxide grains of which secondary electron emission coefficient is larger than one.

5. The channel plate according to claim 2, wherein said porous element has aluminum oxide as its

main ingredient.

6. The channel plate according to claim 2, wherein said electron multiplier is formed by coating the wall surface of the pore of said porous element.

7. An image intensifier having the channel plate according to claim 2.

8. A photomultiplier having the channel plate according to claim 2.

9. A method for manufacturing a channel plate comprising the steps of: anodizing a substrate of aluminum or a substrate of which main ingredient is aluminum, to form a porous element having a plurality of pores extending through the substrate;

forming electron multipliers on wall surfaces of the pores; and

forming electrodes on the top and bottom faces of the porous element respectively.

10. The method for manufacturing a channel plate according to claim 9, wherein said step of forming the electron multipliers is a step of coating the wall surfaces of the pores of said porous element with a coating layer including a material of which secondary

electron emission coefficient is larger than that of the material forming said porous element.

11. The method for manufacturing a channel plate according to claim 10, wherein said coating layer comprises a material of which secondary electron emission coefficient is larger than 1.

12. The method for manufacturing a channel plate according to claim 11, wherein said coating layer includes oxide grains.

13. The method for manufacturing a channel plate according to claim 10, wherein said coating layer includes oxide grains.

14. The method for manufacturing a channel plate according to claim 9, wherein said aluminum or the substrate of which main ingredient is aluminum is an aluminum film disposed on the electrode to be anodized.